

JANE R. RIGBY

Astrophysicist

NASA Goddard Space Flight Center, Observational Cosmology Lab (Code 665)
Greenbelt, MD 20771 301.286.1507 Jane.Rigby@nasa.gov

RESEARCH INTERESTS

- Galaxy evolution, star-forming galaxies, and active galactic nuclei
- Gravitational lenses as natural telescopes
- Diagnostic astrophysical spectroscopy
- Science systems engineering for future space observatories

EDUCATION

The University of Arizona

Ph.D., March 2006, Astronomy (Advisor: George Rieke)

Thesis: “X-ray and Mid-Infrared Diagnostics of Nuclear Activity in Galaxies”

M.S., May 2003, Astronomy

The Pennsylvania State University

B.S., May 2000, with Honors and Highest Distinction, Astronomy & Astrophysics

B.S., May 2000, with Highest Distinction, Physics

EMPLOYMENT

- Civil Servant Astrophysicist, NASA Goddard Space Flight Center (9/2010 –)
- Project Scientist for Operations, James Webb Space Telescope (12/2018 –). *Responsible for science oversight of the JWST Science & Operations Center (300 FTE, > \$100M)*
- Deputy Operations Project Scientist, James Webb Space Telescope (9/2010 – 11/2018)
- Carnegie Fellow and Spitzer Fellow, Carnegie Observatories (9/2006 – 8/2010)
- Postdoctoral Fellow, University of Arizona (3–9/2006)
- Graduate Student, University of Arizona (2000 – 2006)
- Undergraduate Research Assistant, Penn State (1997 – 2000)

AWARDS

2022	BBC List of 100 inspiring and influential women
2022	Out to Innovate’s “LGBTQ+ Scientist of the Year”
2021	One of <i>Nature</i> ’s “Five Scientists to Watch in 2022”
2018	John C. Lindsay Memorial Award for Space Science
2015	Peer Award, Astrophysics Science Division, NASA GSFC
2014	Robert H. Goddard Award for Diversity and Equal Employment Opportunity
2013	Robert H. Goddard Award for Exceptional Achievement for Science
2013	Outstanding Alumni Award, Eberly College of Science, Penn State
2006–2009	Spitzer Space Telescope Postdoctoral Fellowship

2006	Hubble Fellowship, <i>declined</i>
2006	Chandra Fellowship, <i>declined</i>
2003–2004	Univ. of Arizona Graduate Research Fellowship
2000–2003	NSF Graduate Research Fellowship
2000	Paul Axt Award for Outstanding Graduate, Penn State Honors College
1999	Barry Goldwater Fellowship
1996–2000	Braddock Scholarship, Eberly College of Science, Penn State
1996	U.S. Presidential Scholar

TEAM AWARDS

2019	NASA Group Achievement Award, to the Astrophysics Large Mission Study Teams
2019	Robert H. Goddard Award for Science, to the LUVOIR STDT
2019	Robert H. Goddard Award for Science, to the LUVOIR SSAT
2016	Robert H. Goddard Award for Science, to the JWST Project Science Team
2014	NASA Group Achievement Award, to the NuSTAR Science Team

SUCCESSFUL NASA PROPOSALS

As Principal Investigator:

- James Webb Space Telescope, Early Release Science Director's Discretionary Time (ERS DDT), 55 hr: *TEMPLATES: Targeting Extremely Magnified Panchromatic Lensed Arcs and Their Extended Star formation.*
- NASA Keck Guest Observer, 2021A, 2020A, 2016B, 2013A, 2011A, 2010A
- Hubble Space Telescope Cycle 29 GO, 10 orbits: *Mapping the escape of Ly alpha and ionizing photons from an extreme emission-line lensed galaxy*
- Hubble C23 GO, 20 orbits: *The Ultimate Emission Line Diagnostics Study at z=1.4*
- Hubble C21 GO, 3 orbits: *The Morphology and Star Formation Distribution in a Big Cool Spiral LIRG.*
- Hubble C21 Education and Public Outreach, \$40K: *Magnifying Student Understanding of Galaxies Through Exploration Outside the Classroom.*
- Spitzer Space Telescope C9 Guest Observer (GO), 61 hr: *Precise Stellar Masses at 1 < z < 3 in Strongly Lensed Galaxies Observed by HST*
- Herschel OT2, 2.1 hr Priority 1: *How do Compton-thick AGN reprocess their energy?*
- Hubble C19 GO, 4 orbits: *Dissecting star formation and extinction in the brightest lensed galaxy.*
- Herschel OT1 GO, 19 hr: *Resolved Herschel photometry and line spectroscopy for the brightest lensed galaxy at z~2.*
- Chandra C12 GO, 60 ks, 3 Hubble orbits: *Does the brightest lensed galaxy contain an AGN?*
- Hubble C18 GO, 4 orbits: *Dissecting star formation, extinction, & stellar populations in the brightest lensed galaxy.*

- Hubble C17 GO, 2 orbits: *Resolved H α star formation in two lensed galaxies at z=0.9.*
- Spitzer Director's Discretionary Time, 2008, 6 hr: *Three new bright lensed galaxies.*

As Co-investigator:

- Hubble Cycle 30, 30 hr (PI Mainali): *Studying ionizing photon escape from a bright gravitationally lensed reionization era analog at z = 1.43*
- JWST Cycle 1 GO, archival (PI Mainali): *How efficiently do galaxies produce ionizing photons in the epoch of reionization?*
- JWST C1 GO, 24 hr (PI Rivera-Thorsen): *How do ionizing photons escape the Sunburst Arc?*
- JWST C1 GO, 19 hr (PI Khullar): *Characterizing Stellar Mass Assembly and Physical Properties in the Brightest Galaxy in the Redshift > 5 Universe*
- JWST C1 GO, 65 hr (PI Fan): *A Comprehensive JWST View of the Most Distant Quasars Deep Into the Epoch of Reionization.*
- JWST C1 GO, 14 hr (PI Coe): *A Strongly Magnified Individual Star and Parsec-Scale Clusters Observed in the First Billion Years at z = 6*
- JWST C1 GO, 11 hr (PI Coe): *Physical Properties of the Triply-Lensed z = 11 Galaxy.*
- JWST C1 GO, 24 hr (PI Jaskot): *Revealing the Ionizing Spectrum of Low-Metallicity Galaxies.*
- JWST C1 GO, 10 hr (PI Stark): *Spectroscopy of Dwarf Galaxies in the Reionization Era: Ionizing Sources and Gas Conditions at Very Low Metallicity.*
- Hubble C29, 10 orbits (PI Mainali): *Measuring ionizing photon escape from an exceptionally bright gravitationally lensed arc at z=1.43*
- Hubble C29, 4 orbits (PI Coe): *Monitoring Earendel, the Lensed z 6 Star*
- Hubble C28, 3 orbits (PI Dahle): *A bright arc behind an extreme cluster lens at z=1.5*
- Hubble Cycle 27, 27 orbits (PI Chisholm): *What lurks below the Lyman Limit? Uncovering the unseen ionizing continuum of massive stars*
- Hubble Cycle 27, 42 orbits (PI Gladders): *Lyman Continuum Escape in High Definition*
- Hubble Cycle 27, 133 orbits (PI Berg): *The COS Legacy Archive Spectroscopic Survey (CLASSY): A UV Treasury of Star-Forming Galaxies*
- Hubble Cycle 27, 4 orbits (PI Bayliss): *Measuring the Stellar Populations In a Strongly Lensed X-ray Emitting Dwarf Starburst at Cosmic Noon*
- Hubble Cycle 25, 3 orbits (PI Dahle): *Probing spatially variable Lyman-continuum escape from the brightest lensed galaxy in the universe*
- Chandra Cycle 19, 500 ks + 7 HST orbits (PI Bayliss): *The Chandra Strong Lens Sample: Revealing Baryonic Physics In Strong Lensing Selected Clusters*
- Chandra Cycle 19, 40 ks + 6 HST orbits (PI Bayliss): *Does the Brightest Strongly Lensed Galaxy Contain An AGN?*
- Hubble Cycle 25, 14 orbits (PI Dahle): *A high-definition study of the brightest lensed galaxy in the universe*

- Hubble Cycle 23, 12 orbits (PI Whitaker): *A Chance Alignment: Resolving a Massive Compact Galaxy Actively Quenching at $z=1.8$*
- Hubble Cycle 22, 15 orbits (PI Bayliss): *Resolving Lyman-alpha Emission On Physical Scales <270 pc at $z>4$*
- Hubble Cycle 20, 107 orbits (PI Gladders): *Resolving the Star Formation in Distant Galaxies.*
- NASA Keck Guest Observer, 2011B (PI Wuyts)
- Herschel OT2, 60 hr Priority 1 (PI Malhotra): *Herschel Extreme Lensing Line Observations.*
- Hubble Cycle 18, 17 orbits (PI Richard): *Evolution in the size-luminosity relation of HII regions in gravitationally-lensed galaxies.*
- Spitzer Cycle 7 Guest Observer (GO), 69 hr (PI Gladders): *Mass across the redshift desert: Stellar masses in a large and uniform sample of strongly-lensed galaxies at $1 < z < 3$.*
- Spitzer Cycle 7 GO, 119 hr (PI Madore): *Cepheids in the SMC: Mapping the 3D structure, the metallicity sensitivity of the Leavitt Law, and the temperature structure...*
- Spitzer Cycle 6 GO, 705 hr (PI Freedman): *The Hubble Constant.*
- Spitzer Cycle 5 Guaranteed Time Observer (GTO), 20 hr (PI G. Rieke): *Star Formation Rates and Metallicities at $z = 1$.*
- Spitzer Cycle 5 GO, 13 hr (PI Oey): *Starbursts: Emitters or Absorbers?*
- Spitzer Cycle 5 GO, 43 hr (PI Papovich): *Survey of Paschen α in High Redshift Galaxies.*
- Spitzer Cycle 4 GO, 28 hr (PI Dressler): *Unmasking the Strong Evolution of Cluster Starbursts*
- Spitzer Cycle 4 GTO, 38 hr (PI G. Rieke): *IRS Spectroscopy of Gravitationally Lensed $z > 1$ Infrared-Luminous Galaxies.*
- Spitzer Cycle 4 GO, 34 hr (PI Papovich): *Survey of Paschen α in High Redshift Galaxies.*
- Spitzer Cycle 3 GTO, 50 hr (PI G. Rieke): *IRS Spectroscopy of Gravitationally Lensed $z > 1$ Infrared-Luminous Galaxies.*
- Spitzer Cycle 3 GTO, 8 hr (PI G. Rieke): *How do Buried “Compton-Thick” AGN Re-process Their Energy?*
- Hubble Cycle 9, 33 orbits (PI Churchill): *Establishing the Gaseous Phases of Galaxies Following the Epoch of Star Formation*

PROFESSIONAL DEVELOPMENT COURSES

- Master the Media training with George Merlis, 2 days, 9/2021
- Share the Science Training, Alan Alda Center for Communicating Science, 2 days, 8/2021
- Ethics in Action: Leading with Integrity, Brookings Executive Education, 2 days, 2019
- Strategies for Conflict Resolution, Brookings Executive Education, 2 days, 2018
- Respectful Confrontations, GSFC, 2 days, 2016
- Women’s Leadership Collaborative, Brookings Executive Education, 8 days, 2014–2015

- NASA Leadership Development and Excellence in Management, Program B: Leading Groups and Teams (LDEM-B), 2014
- GSFC Python Boot Camp, 3 days, 2015
- NASA GSFC Road to Mission Success, 2011
- NASA GSFC Project Scientist Training, 2010

COLLOQUIA AND SEMINARS

Colloquia: Astrophysics Science Division, NASA Goddard (2022); University of Chicago (2022); University of Maryland (2022); Ball Aerospace, Boulder (2022, 500 attendees); Raytheon, Aurora (2022); Nordic Network for Diversity in Physics (2022); McGill University, Montreal (2021); University of Cincinnati (2021); Stockholm University and the Swedish Royal Institute of Technology (2021); Princeton University and the Institute for Advanced Study (2019); The University of Michigan (2019); The University of Illinois (2019); Ohio University (2018); John C. Lindsay Memorial Lecture at NASA GSFC (2018); New Mexico State University (2017); Michigan State University (2016); National Radio Astronomy Observatory (2016); Carnegie Institution for Science's Department of Terrestrial Magnetism (2015); Johns Hopkins Applied Physics Lab (2015); Yale University (2014); U. S. Naval Observatory (2014); University of Leiden, Netherlands (2014); NASA Goddard Space Flight Center (2014); Space Telescope Science Institute (2013); University of California at Berkeley (2012); Penn State (2012); University of Pittsburgh (2012); Boston University (2012); University of Maryland (2011); St. Mary's University in Halifax, Canada (2011); University of Michigan (2011); University of Texas at Austin (2011); Goddard Space Flight Center (Science Colloquium, 2011); University of Michigan (2009); University of Washington (2009); University of Arizona (2008); UCLA (2008); Harvard (2008); Carnegie Observatories (2008)

Seminars: The University of Maryland (2022); Bahcall Lunch, Institute for Advanced Study (2022); The University of Michigan (2019); The University of Illinois (2019); The University of Maryland (2019); Johns Hopkins (2018); Rutgers (2018); New Mexico State University (2017); Michigan State University (2016); University of California at San Diego (2012); Penn State (2012) Harvard-Smithsonian Center for Astrophysics (2011); St. Mary's University in Halifax (2011); University of Michigan (2011); Texas A&M University (2011); University of Texas at Austin (2011); Carnegie Institution for Science's Department of Terrestrial Magnetism (2011); UC Santa Barbara (2010); Arizona State University (2010); Carnegie Observatories (2010); Tufts University (2010); Georgia Tech (2009); STScI (2009); Johns Hopkins (2009); NASA Goddard Space Flight Center (2009); Herzberg Institute of Astrophysics (Victoria, BC, 2009); Princeton (2008); University of Maryland (2008); STScI (2007); UC Irvine (2007); NASA JPL (2007); Caltech (2005); Harvard-Smithsonian CfA (2005); Carnegie Observatories (2005); NASA JPL (2005); Penn State (2003)

PROFESSIONAL SERVICE

Trustee	American Astronomical Society, 6/2021–5/2023
Panelist	Panel on State of the Profession and Societal Impacts, Astro 2020 Decadal
Member	Science & Technology Definition Team, LUVOIR, 2016–2019
Member	JWST Science Working Group, 2018–
Member	Hubble Fellowship Selection Committee, 2016
Co-Organizer	Inclusive Astronomy 2015 Conference
Referee	Astrophysical Journal; ApJ Letters; Astronomical Journal
Reviewer	Hubble Space Telescope Time Allocation Panel, Cycles 18, 19, 22, 26
Reviewer	National Science Foundation, multiple reviews in 2012
Reviewer	Spitzer Space Telescope Time Allocation Panel, Cycles 5, 8
Reviewer	NASA Keck Time Allocation Panel, 2009B
Reviewer	Multiple JWST project subsystem reviews, 2010–
Reviewer	Multiple Spitzer reviews, 2008
Member	AAS FAMOUS grants selection committee, 2018
Member	AAS SGMA Committee, 2015–2017
Member	Executive Committee, AAS Working Group on LGBTIQ Equality, 2012–2015
Member	Astronomy Allies, 2015–
Member	GSFC Science Director’s Committee, 2011–2012
Member	Users Group, NASA Infrared Science Archive, 2006–2009
Organizer	Carnegie Observatories Internal Symposia, 2007, 2008, 2009
Contributor	Astropy (open source software)
Contributor	AstroBetter.com

RESEARCH ADVISING

2019–	JWST Postdoctoral Fellow Ramesh Mainali
2019–2021	JWST Postdoctoral Fellow Soniya Sharma
2017–2020	JWST Postdoctoral Fellow Michael Florian. Now at U. Arizona
2018–2019	JWST Postdoctoral Fellow Travis Fischer. Now staff at STScI
2015–2017	NASA Postdoctoral Program (NPP) Fellow Stephanie LaMassa. Now staff at STScI
2013–2016	NPP Fellow Chun Ly. Now staff at U. Arizona
2012–2015	NPP Fellow Kate Whitaker. Now faculty at UMass
2011–2014	NPP Fellow Stacy Teng. Now staff at Institute for Defense Analyses
2011–2013	Univ. of Maryland graduate student Alice Olmstead. Now faculty at Texas State
2008	Princeton graduate student Gonzalo Aniano
2005–2006	Univ. of Arizona undergrad Praveen Kundurthy
2003–2004	Penn State undergrad N. Milutinovic

OBSERVING EXPERIENCE

Keck 10m	KCWI (optical IFU)*, NIRSPEC (near-IR spectrograph)*, ESI (optical echelle)*
Gemini 8m	GNIRS (near-IR spectrograph)*
Magellan 6.5m	LDSS3 (multi-object optical spectrograph)* IMACS (multi-object optical spectrograph)* FIRE (single-object near-IR echelle)* MagE (single-object optical echelle)* PANIC (near-IR imager)
MMT 6.5m	Megacam (wide-field optical imager) Blue Channel (optical spectrograph) FSPEC (near-IR spectrograph)
CTIO 4m	ISPI (near-IR imager)
LCO 2.5m	B&C spectrograph
Steward 2.3m	90 Prime (wide-field optical imager) B&C spectrograph 2Kx2K CCD FSPEC
VATT 1.8m	2Kx2K CCD
Steward 1.54m	2Kx2K CCD (*: as PI)

PRESS COVERAGE

- Quoted about JWST first extragalactic science results, Nov. 2021, outlets including CNN, NPR, and The New York Times
- Extensively quoted about JWST first science images, July 2022, outlets including The New York Times, The Washington Post, The Atlantic, Scientific American, BBC, The Independent, Christian Science Monitor, TMZ, Space.com, Miami Herald, Al Jazeera, and Yahoo News
- “Our Powerful, Shiny New Space Telescope Got Its First Upsetting Ding”, The Atlantic, 6/14/2022
- “Hubble telescope pinpoints the farthest star ever observed”, March 2022, outlets including National Geographic, Scientific American, Washington Post
- Extensively quoted about first sharp JWST images, March 2022, outlets including BBC, AP, Scientific American, Nature, Space.com
- Extensively quoted about JWST launch and deployments, Jan. 2022, outlets including The New York Times, The Washington Post, National Geographic, The Atlantic, NPR
- “Highlights from the James Webb Space Telescope’s long-awaited launch”, The New York Times, 12/25/2021 (science consultant)
- “Nature’s 10: Ten people who helped shape science in 2021 & Ones to watch in 2022”, Nature, 12/15/2021

- Quoted in JWST pre-launch coverage, Dec. 2022, outlets including The Washington Post, Nature, KPCC, Radio New Zealand, Smithsonian magazine, NPR Morning Edition
- Quoted in “US astronomy’s 10-year plan is super-ambitious”, Nature, 11/4/2021 item Twelve press releases about research results, from NASA, ESA, AAS, and MIT
- Profiled by Nature article on LGBT diversity and inclusion: Nature, 505, 249 (2014)
- “Women to Watch Pushing Back the Final Frontier”, Forbes.com 10/2013

PUBLIC OUTREACH

Speaker	U. S. Presidential Scholars Alumni Association, 2019
Speaker	Vernon Memorial Lecture, University of Delaware, 2017
Speaker	JWST Public Lecture, New Mexico State University, 2017
Panelist	Conference for Undergraduate Women in Physics, Harvard University, 2017
Speaker	GSFC Facebook Live event (300,000 views, 3,000 shares, 7,000 likes, 2,500 comments)
Speaker	Federal Deposit Insurance Corporation, 2016
Speaker	Conference for Undergraduate Women in Physics, Georgia Tech, 2016
Speaker	The Library of Congress, 2014
Speaker	TEDxMidAtlantic, Washington (800 attendees), 2011
Speaker	Public talks at TED Full Spectrum Auditions (NYC), Monmouth University, Anne Arundel Community College, Goddard Visitors’ Center, Carroll County Public Library, Explore@Goddard, 2010–2012
Awarded	Best Speaker of the year award, IEEE New Jersey Coast Section, 2010
Speaker	Huntington Library public astronomy series (350 attendees), 2009
Speaker	Steward Observatory public astronomy series (130 attendees), 2008
Volunteer	Longfellow Elementary & Webster Elementary, Pasadena, 2008
Instructor	SMART Science & Math Day, Sahuaro Girl Scout Council, 2006
Volunteer	Daughters on Campus Day, U. Arizona, 2002–2005
Organizer	Science Night, Hohokam Middle School, 2003
Volunteer	Astrofest II (1300-visitor outreach program), Penn State, 2000
Co-Founder	Astrofest I (1700-visitor 3-night outreach program), Penn State, 1999
Volunteer	Every Clear Friday public star parties, Penn State, 1996–2000

TEACHING

- Lecturer, NASA Goddard postdoc career seminar, 2010–2014
- Lecturer, University of Maryland Astronomy Dept. career seminar, 2011
- Lecturer, Carnegie–Claremont Astrophysics Seminar, 2008–2009
- Co-instructor, Astro 299 (2005, Univ. Arizona)
Guided student-directed Independent Study, 10 students, with Dr. Ed Olszewski.
- Teaching Assistant and lecturer, Astro 203 (2003, Univ. Arizona)
With Dr. Ed Olszewski. Nominated for Outstanding Teaching Assistant.

- Instructor, Project EON (2003)
Created after-school Astronomy seminar for at-risk high school students.
- Lecturer, Astro 296 Research Seminar (2005, Univ. Arizona)
- Lecturer, K-12 Teacher Development Workshop (2004, NOAO)

CONFERENCES AND WORKSHOPS

* = On Science Organizing Committee

- 2022 International Space Science Institute (Bern) - topical meeting on JWST star-forming galaxies
- 2021 Keynote, NSF Astronomy & Astrophysics Symposium - virtual
- 2021 Winter meeting, American Astronomical Society - virtual
- 2019 Revolutionary Spectroscopy as a Springboard to Webb - Leiden
- 2019 Inclusive Astronomy 2019 - Baltimore
- 2019 European Week of Astronomy and Space Science (EWASS) - Lyon
- 2019 Metals in Galaxies, Near and Far: Looking Ahead - Leiden
- 2019 Space Astrophysics Landscape for the 2020s and Beyond - Potomac
- 2018 IAU focus meeting: JWST Launch, Commissioning, and Cycle 1 Science - Vienna
- 2018 Dot Astronomy X - Baltimore
- 2017 Characterizing Galaxies with Spectroscopy with a view for JWST - Leiden
- 2017 * Chemical Evolution of the Universe (GMT Community Science) - Tarrytown
- 2017 Spectral Diagnostics to Explore the Cosmic Dawn with JWST - Baltimore
- 2017 Winter meeting, American Astronomical Society - Grapevine
- 2016 Magellan Science Symposium - Washington
- 2016 Mapping the Pathways of Galaxy Transformation Across Time and Space - Avalon
- 2016 Winter meeting, American Astronomical Society - Kissimmee
- 2015 Exploring the Universe with JWST - Noordwijk, Netherlands
- 2015 International Astronomical Union - Honolulu
- 2015 Understanding Nebular Emission in High-z Galaxies - Pasadena
- 2015 * Inclusive Astronomy - Nashville
- 2014 Wide Field Infrared Surveys - Pasadena
- 2014 Winter Meeting, American Astronomical Society - Washington
- 2013 Cluster Lensing: Peering into the Past, Planning for the Future - Baltimore
- 2013 Winter Meeting, American Astronomical Society - Long Beach

- 2012 Exploring the Dark Universe: Frontier of Cosmology and Astrophysics in the 21st Century - Tucson
- 2012 SnowPAC 2012: Gravitational lensing in the Age of Survey Science - Snowbird, Utah
- 2011 Frontier Science Opportunities with JWST - Baltimore
- 2011 Through the Infrared Looking Glass: A Dusty View of Galaxy and AGN Evolution - Pasadena
- 2011 Winter Meeting, American Astronomical Society - Seattle
- 2009 NuSTAR Science Team - Pasadena
- 2009 Reionization to Exoplanets: Spitzer's Growing Legacy - Pasadena
- 2009 Assembly, Gas Content, and SF History of Galaxies - Charlottesville
- 2009 Summer Meeting, American Astronomical Society - Pasadena
- 2009 Winter Meeting, American Astronomical Society - Long Beach
- 2008 Caltech-Carnegie Postdoc Workshop - Lake Arrowhead
- 2008 High Energy Astrophysics Division, AAS - Los Angeles
- 2007 Galaxy and Black Hole Evolution: Towards a Unified View - Tucson
- 2007 New Horizons in Astronomy - Austin
- 2007 Obscured AGN Across Cosmic Time - Seeon, Germany
- 2007 ADVANCE Faculty Horizons - Baltimore
- 2007 Caltech-Carnegie Postdoc Workshop - Lake Arrowhead
- 2007 Spitzer Fellows Symposium - Pasadena
- 2006 Winter Meeting, American Astronomical Society - Washington
- 2005 Infrared Diagnostics of Galaxy Evolution - Pasadena
- 2005 Nearly Normal Galaxies in a Λ CDM Universe - Santa Cruz
- 2004 The Spitzer Space Telescope: New Views on the Cosmos - Pasadena
- 2003 SIRTF Pre-Launch Science Workshop - Pasadena
- 2003 Women in Astronomy II - Pasadena
- 2003 Workshop on the Topology of Reionization - Tucson
- 2000 Gas and Galaxy Evolution - Socorro
- 2001 Winter Meeting, American Astronomical Society - San Diego
- 2000 Winter Meeting, American Astronomical Society - Atlanta
- 1999 Winter Meeting, American Astronomical Society - Austin
- 1998 Synthesis Imaging & Interferometry Summer School - Socorro
- 1998 Winter Meeting, American Astronomical Society - Washington

PUBLICATION LIST

Summary:

- | | |
|------|---|
| 134 | refereed papers |
| 14 | first-author refereed papers (+ 2 submitted) |
| 23 | second-author refereed papers (+ 1 submitted) |
| 760 | citations to first-author refereed papers |
| 955 | citations to second-author refereed papers |
| 9580 | total citations to refereed papers |
| 53 | Hirsch H-index (53 refereed papers with ≥ 53 citations on ADS) |
-

REFEREED PUBLICATIONS

Abbreviations: ApJ = The Astrophysical Journal; AJ = The Astronomical Journal; MNRAS = Monthly Notices of the Royal Astronomical Society; A&A = Astronomy & Astrophysics; PASP = Publications of the Astronomical Society of the Pacific

142. Rigby, J., Lightsey, P. A., García Marín, M. et al. 2022, submitted to PASP.
How dark the sky: the JWST backgrounds. [on arXiv](#)
141. Rigby, J., Perrin, M., McElwain, M. et al. 2022, submitted to PASP.
The Science Performance of JWST as Characterized in Commissioning. [on arXiv](#)
140. McElwain, M., Feinberg, L., Perrin, M. et al. 2022, submitted to PASP.
The James Webb Space Telescope Mission: Optical Telescope Element Design, Development, and Performance
139. Gardner, J., Mather, J. et al. 2022, submitted to PASP.
The James Webb Space Telescope Mission
138. Mainali, R., & Rigby, J., submitted to ApJ.
Metallicity determination of high redshift galaxies: A machine learning approach
137. Mainali, R., et al. 2022, submitted to MNRAS.
Spectroscopy of CASSOWARY gravitationally-lensed galaxies in SDSS: characterisation of an extremely bright reionization-era analog at $z = 1.42$
136. Sharon, K., Cerny, C., Rigby, J., et al. 2022, submitted to ApJ.
HST-Based Lens Model of the First Extragalactic JWST Science Target, SDSS J1226+2152, in Preparation for TEMPLATES
135. Welch, B., et al. 2022, submitted to ApJ.
RELICS: Small-scale Star Formation in Lensed Galaxies at $z=6-10$
134. Mainali, R., Rigby, J., Chisholm, J., et al. 2022, ApJ in press.
The connection between galactic outflows and the escape of ionizing photons.

133. Sharon, K. et al. 2022, ApJ in press.
The Cosmic Telescope that Lenses the Sunburst Arc, PSZ1 G311.65–18.48: Strong Gravitational Lensing model and Source Plane Analysis
132. James, B. et al. 2022, ApJS, 262, 37.
CLASSY II: A technical overview of the COS Legacy Archive Spectroscopy Survey
131. Solimano, M. et al. 2022, ApJ, 935, 17.
Revealing the Nature of a Ly α halo in a strongly-lensed interacting system at $z = 2.92$.
130. Shaban, A. et al. 2022, ApJ, 936, 77.
A 30 kpc Spatially Extended Clumpy and Asymmetric Galactic Outflow at $z = 1.7$
129. Berg, D., et al. 2022, ApJS, 261, 31.
The COS Legacy Archive Spectroscopy Survey (CLASSY) Treasury Atlas.
128. Bordoloi, R., et al. 2022, Nature, 606, 59.
Resolving the HI in Damped Lyman- α systems that power star-formation.
127. Welch, B., et al. 2022, Nature, 603, 815.
A highly magnified star at redshift 6.2
126. Solimano, M., et al. 2021, A&A, 655, 42
Molecular gas budget and characterization of four intermediate-mass star-forming galaxies at $z \approx 2 - 3$
125. Hanson, M., Ruiz, E., et al. 2021, National Academies of Science, Engineering, and Medicine.
Astro2020: Report on the Panel on the State of the Profession and Societal Impacts
124. Tejos, N. et al. 2021, MNRAS, 507, 663.
Telltale signs of metal recycling in the circumgalactic medium of a $z \sim 0.77$ galaxy.
123. Sharma, S., et al. 2021, MNRAS, 505, 1.
Resolving star-forming clumps in a $z \geq 2$ lensed galaxy: a pixelated Bayesian approach.
122. Florian, M., **Rigby, J.**, Acharyya, A., et al. 2021, ApJ in press.
Spatial Variation in Strong Line Ratios and Physical Conditions in Two Strongly-Lensed Galaxies at $z \sim 1.4$
121. **Rigby, J.**, Florian, M., Acharyya, A., et al. 2021, ApJ, 908, 154.
A Comparison of Rest-frame Ultraviolet and Optical Emission-Line Diagnostics in the Lensed Galaxy SDSS J1723+3411 at Redshift $z = 1.3293$
120. Khullar, G., et al. 2021, ApJ, 906, 107.
COOL-LAMPS I. An Extraordinarily Bright lensed Galaxy at Redshift 5.04

119. Akhshik, M. et al. 2020, ApJ, 900, 184
REQUIEM-2D Methodology: Spatially Resolved Stellar Populations of Massive Lensed Quiescent Galaxies from Hubble Space Telescope 2D Grism Spectroscopy
118. Dai, L. et al. 2020, MNRAS, 495, 3192.
Asymmetric Surface Brightness Structure of Lensed Arc in SDSS J1226+2152: A Case for Dark Matter Substructure.
117. Byler, N., Kewley, L, **Rigby, J.**, et al. 2020, ApJ, 893, 1.
A comparison of UV and optical metallicities in star-forming galaxies.
116. Sharon, K., et al. 2020, ApJS, 247, 12.
Strong Lens Models for 37 Clusters of Galaxies from the SDSS Giant Arcs Survey.
115. Lopez, S., et al. 2020, MNRAS, 491, 4442.
Slicing the cool circumgalactic medium along the major-axis of a star-forming galaxy at $z = 0.7$.
114. Bayliss, M., et al. 2020, Nature Astronomy, 4, 159.
An X-ray Detection of Star Formation in a Highly Magnified Giant Arc.
113. Fischer, T., et al. 2019, ApJ, 887, 200.
A Dissection of Spatially Resolved AGN Feedback across the Electromagnetic Spectrum
112. Rivera-Thorsen, T. E. et al. 2019, Science, 366, 738.
Gravitational lensing reveals ionizing ultraviolet photons escaping from a distant galaxy.
111. Chisholm, J., **Rigby, J.**, et al., 2019, ApJ, 882, 182.
Constraining the metallicities, ages, star formation histories, and ionizing continua of extragalactic massive star populations.
110. Acharyya, A., Kewley, L. J., **Rigby, J.**, et al., 2019, MNRAS, 488, 5862.
Rest-frame UV and optical emission line diagnostics of ionized gas properties: a test case in a lensed galaxy at $z \sim 1.7$.
109. Kewley, L., et al., 2019, ApJ , 880, 16.
Theoretical ISM pressure and electron density diagnostics for local and high-redshift galaxies.
108. Fischer, T., **Rigby, J.**, et al. 2019, ApJ, 875, 102.
Spatially Resolved Outflows In a Seyfert Galaxy at $z = 2.39$
107. Dunham, S., Sharon, K., Florian, M., **Rigby, J.**, et al. 2019, ApJ, 875, 18.
Lens Model and Source Reconstruction Reveal the Morphology and Star Formation Distribution in the Cool Spiral LIRG SDSS J1438+1454.
106. Chisholm, J., et al. 2018, A&A, 616, 30.

Accurately predicting the escape fraction of ionizing photons using restframe ultraviolet absorption lines.

105. Gazagnes, S., et al. 2018, A&A, 616, 29.
Neutral gas properties of Lyman continuum emitters: column densities and covering fractions from UV absorption lines.
104. Lopez, S., et al. 2018, Nature, 554, 493
A clumpy and anisotropic galaxy halo at $z=1$ revealed by gravitational-arc tomography.
- 103. Rigby, J.** et al. 2018, ApJ, 853, 87.
The Magellan Evolution of Galaxies Spectroscopic and Ultraviolet Reference Atlas (MEGaSaura) II: Stacked Spectra.
- 102. Rigby, J.** et al. 2018, AJ, 155, 104.
The Magellan Evolution of Galaxies Spectroscopic and Ultraviolet Reference Atlas (MEGaSaura) I: The Sample and the Spectra.
101. Chisholm, J., Bordoloi, R., **Rigby, J.**, & Bayliss, M. 2018, MNRAS, 474, 1688.
Feeding the Fire: Tracing the mass-loading of $10^7 K$ galactic outflows with OVI absorption.
100. Rivera-Thorsen, T. E. et al. 2017, A&A Letters, 608, 4.
The Sunburst Arc: Direct Lyman α escape observed in the brightest known lensed galaxy.
99. LaMassa, S. et al. 2017, ApJ, 847, 100.
The Hunt for Red Quasars: Luminous Obscured Black Hole Growth Unveiled in the Stripe82 X-ray Survey.
98. Gonzalez-Lopez, J., et al. 2017, ApJ Letters, 846L, 22.
ALMA Resolves the Molecular Gas in a Young Low-Metallicity Starburst at $z = 1.7$
97. Bayliss, M. et al. 2017, ApJ Letters, 845L, 14.
Spatially Resolved Patchy Lyman alpha Emission with the Central Kiloparsec of a Strongly Lensed Quasar Host Galaxy at $z = 2.8$
96. Johnson, T., **Rigby, J.**, et al. 2017, ApJ Letters, 843L, 2.
Star Formation at $z = 2.481$ in the Lensed Galaxy SDSS J1110+6459: Star Formation down to 30 parsec scales.
- 95. Rigby, J.** et al. 2017, ApJ, 843, 2.
Star Formation at $z=2.481$ in the Lensed Galaxy SDSS J1110+6459, II: What Is Missed at the Normal Resolution of the Hubble Space Telescope?
94. Johnson, T. et al. 2017, ApJ, 843, 2.
Star Formation at $z=2.481$ in the Lensed Galaxy SDSS J1110+6459, I: Lens Modeling

and Source Reconstruction.

93. Malhotra, S. et al. 2017, ApJ, 835, 110.
Herschel Extreme Lensing Line Observations: [CII] variations in galaxies at z=1–3.
92. LaMassa, S. et al. 2017, ApJ, 835, 91.
Chandra Reveals Heavy Obscuration and Circumnuclear Star Formation in Seyfert 2 Galaxy NGC 4968
91. Sharon, K. et al. 2017, ApJ, 835, 5.
Lens Model and Time Delay Predictions for the Sextuply Lensed Quasar SDSS J2222+2745.
90. Ly, C., Malkan, M., **Rigby, J.**, & Nagao, T. 2016, ApJ, 828, 67.
The Metal Abundance Across Cosmic Time (MACT) Survey II: Evolution of the Mass-Metallicity Relation over 8 Billion Years, Using [O III] λ 4362Å-based Metallicities.
89. Ly, C., Malhotra, S., Malkan, M., **Rigby, J.**, Kashikawa, N., De Los Reyes, M., & Rhoads, J. 2016, ApJ Supplements, 226, 5.
The Metal Abundance Across Cosmic Time (MACT) Survey I: Optical Spectroscopy in the Subaru Deep Field.
88. Scowcroft, V. et al. 2016, MNRAS, 459, 1170.
The Carnegie Chicago Hubble Program: The Mid-Infrared colours of Cepheids and the Effect of Metallicity on the CO Band-head at 4.6 μ m.
87. Bordoloi, R., **Rigby, J.**, Tumlinson, J., Bayliss, M., Sharon, K., Gladders, M., & Wuyts, E., 2016, MNRAS, 458, 1891.
Spatially Resolved Galactic Wind in Lensed Galaxy RCSGA 032727–132609.
86. Scowcroft, V., et al., 2016, ApJ, 816, 49.
The Carnegie Hubble Program: The Distance and Structure of the SMC as Revealed by Mid-infrared Observations of Cepheids.
85. Annuar, A., Gandhi, P., Alexander, D. M., et al. 2015, ApJ, 815, 36.
NuSTAR Observations of the Compton-thick Active Galactic Nucleus and Ultraluminous X-Ray Source Candidate in NGC 5643.
84. **Rigby, J.**, Bayliss, M., Gladders, M., Sharon, K., Wuyts, E., Dahle, H., Johnson, T., & Peña-Guerrero, M. 2015, ApJ Letters, 814, 6.
C III] Emission in Star-forming Galaxies Near and Far.
83. Teng, S., **Rigby, J.**, Stern, D., et al. 2015, ApJ, 814, 56.
A NuSTAR Survey of Nearby Ultraluminous Infrared Galaxies.
82. Bauer, F. et al. 2015, ApJ 812, 116.
NuSTAR Observations of the Hard X-ray Reflection Spectrum of NGC 1068.

81. Dahle, H., Gladders, M., Sharon, K., Bayliss, M., & **Rigby, J.**, 2015, ApJ, 813, 67.
A Time Delay Measurement for the Cluster-Lensed Sextuple Quasar SDSS J2222+2745.
80. Whitaker, K. E., et al. 2015, ApJ Letters, 811, 12L.
Galaxy Structure as a Driver of the Star Formation Sequence Slope and Scatter.
79. Ly, C., **Rigby, J.**, Cooper, M., & Yan, R. 2015, ApJ, 805, 45.
Metal-Poor, Strongly Star-Forming Galaxies in the DEEP2 Survey: The Relationship Between Stellar Mass, Temperature-Based Metallicity, and Star Formation Rate.
78. Whitaker, K. et al. 2014, ApJ, 795, 104.
Constraining the Low-Mass Slope of the Star Formation Sequence at 0.5<z<2.5
77. Sharon, K., Gladders, M., **Rigby, J.**, Wuyts, E., Bayliss, M., Johnson, T., Florian, M., & Dahle, H. 2014, ApJ, 795, 50.
The Mass Distribution of the Strong Lensing Cluster SDSS J1531+3414
76. Tremblay, G. R. et al., 2014, ApJ Letters, 790, 26.
A Thirty Kiloparsec Chain of “Beads on a String” Star Formation Between Two Merging Early Type Galaxies in the Core of a Strong Lensing Galaxy Cluster.
75. Bayliss, M., **Rigby, J.**, Sharon, K., Wuyts, E., Florian, M., Gladders, M., Johnson, T., & Oguri, M. 2014, ApJ, 790, 144.
The Physical Conditions, Metallicity, and Metal Abundance Ratios in a Highly Magnified Galaxy at z=3.6252.
74. Olmstead, A., **Rigby, J. R.**, Swinbank, M., & Veilleux, S. 2014, AJ, 148, 65.
A magnified view of star formation at z=0.9 from two lensed galaxies
73. Whitaker, K., **Rigby, J.**, Brammer, G., Gladders, M., Sharon, K., Teng, S., & Wuyts, E., 2014, ApJ, 790, 143.
Resolved Star Formation on Sub-galactic Scales for a Merger at Z=1.7.
72. **Rigby, J.**, Bayliss, M. B., Gladders, M. D., Sharon, K., Wuyts, E., & Dahle, H., 2014, ApJ, 790, 44. *On the Lack of Correlation Between Mg II 2796, 2803 Å and Lyman α Emission in Lensed Star-Forming Galaxies.*
71. Rhoads, J. E. et al., 2014, ApJ, 787, 8.
Herschel Extreme Lensing Line Observations: Dynamics of two strongly lensed normal galaxies near redshift two.
70. Teng, S. H. et al., 2014, ApJ, 785, 19.
NuSTAR reveals an intrinsically luminous X-ray weak broad absorption line quasar in the ultraluminous infrared galaxy Markarian 231.
69. Wuyts, E., **Rigby, J. R.**, Gladders, M. D., & Sharon, K. 2014, ApJ, 781, 61.

A Magnified View of the Kinematics and Morphology of RCSGA 032727-132609: Zooming in on a Merger at z=1.7.

68. Scowcroft, V., et al., 2013, ApJ, 773, 106
The Carnegie Hubble Program: The Infrared Leavitt Law in IC 1613.
67. Harrison, F., et al., 2013, ApJ, 770, 103.
The Nuclear Spectroscopic Telescope Array (NuSTAR) High Energy X-ray Mission.
66. Oemler, A. Jr., Dressler, A., Gladders, M. G., **Rigby, J. R.**, et al. 2013, ApJ, 770, 61.
The IMACS Cluster Building Survey. I: Description of the Survey and Analysis Methods.
65. Sorce, J. G., et al., 2013, ApJ, 765, 94.
Calibration of the Mid-Infrared Tully Fisher Relation.
64. Gladders, M. G., **Rigby, J. R.**, Sharon, K., Wuyts, E., et al. 2013, ApJ, 764, 177.
SGAS 143845.1+145407: A Big, Cool Starburst at Redshift 0.816
63. Livermore, R. C., et al., 2012, MNRAS, 427, 688.
Hubble Space Telescope H α imaging of star-forming galaxies at $z \sim 1\text{--}1.5$: evolution in the properties of giant HII regions.
62. Monson, A. J., Freedman, W. L., Madore, B. F., Persson, S. E., Scowcroft, V., Seibert, M., & **Rigby, J. R.** 2012, ApJ, 759, 146. *The Carnegie Hubble Program: The Leavitt Law at 3.6 and 4.5 micron in the Milky Way.*
61. Freedman, W. L. et al., 2012, ApJ, 758, 24.
Carnegie Hubble Program: A Mid-Infrared Calibration of the Hubble Constant.
60. Rujopakarn, W., Rieke, G. H., Papovich, C. J., Weiner, B. J., **Rigby, J. R.**, et al. 2012, ApJ, 755, 168. *LBT and Spitzer Spectroscopy of Star-forming Galaxies at $1 < z < 3$: Extinction and Star Formation Rate Indicators.*
59. Wuyts, E., **Rigby, J. R.**, Sharon, K., & Gladders, M. G. 2012, ApJ, 755, 73.
Constraints on the Low-Mass End of the Mass-Metallicity Relation at $z=1\text{--}2$ from Lensed Galaxies.
58. Wuyts, E., **Rigby, J.**, Gladders, M., Gilbank, D., & Sharon, K. 2012, ApJ, 745, 86.
Stellar Populations of Highly Magnified Lensed Galaxies: Young Starbursts at $z \sim 2$.
57. Sharon, K., Gladders, M. G., **Rigby, J.**, Wuyts, E., Koester, B., Bayliss, M. B., & Barrientos, F. 2012, ApJ, 745, 2. *Source Plane Reconstruction of the Bright Lensed Galaxy RCSGA 032727-132609*
56. Freedman, W. L. et al., 2011, AJ, 142, 192
The Carnegie Hubble Program.

55. Finkelstein, K. D., Papovich, C., Finkelstein, S. L., **Rigby, J. R.**, Rudnick, G., Willmer, C. N. A., Rieke, M., Egami, E., & Smith, J.-D., 2011, ApJ, 742, 108
Probing the SFR of the z~2.5 Lensed Galaxy SMM J163554.2+661225 with Herschel SPIRE Observations.
54. Scowcroft, V., Freedman, W. L., Madore, B. F., Monson, A., Persson, S. E., Seibert, M., **Rigby, J. R.**, & Sturch, L. 2011, ApJ, 743, 76. *The Carnegie Hubble Program: The Leavitt Law at 3.6 μ m and 4.5 μ m in the Large Magellanic Cloud.*
53. Ballantyne, D. R., Draper, A. R., Madsen, K. K., **Rigby, J. R.**, & Treister, E., 2011, ApJ, 736, 56. *Lifting the Veil on Obscured Accretion: Active Galactic Nuclei Number Counts and Survey Strategies for Imaging Hard X-ray Missions.*
- 52. Rigby, J. R.**, Wuyts, E., Gladders, M., Sharon, K., & Becker, G., 2011, ApJ, 732, 59. *The Physical Conditions of a Lensed Star-forming Galaxy at z=1.7*
51. Hanish, D. J., Oey, M. S., **Rigby, J. R.**, de Mello, D. F., & Lee, J. 2010, ApJ, 724, 1. *A Multiwavelength Study on the Fate of Ionizing Radiation in Local Starbursts.*
50. Koester, B., Gladders, M., Hennawi, J., Sharon, K., Wuyts, E., **Rigby, J.**, Bayliss, M., & Dahle, H, 2010, ApJ, 723, 73.
Two Lensed z ~3 Lyman Break Galaxies Discovered in the SDSS Giant Arcs Survey.
49. Shi, Y., Rieke, G., Smith, P., **Rigby, J.**, Hines, D., Donley, J., Schmidt, G., & Diamond-Stanic 2010, ApJ, 714, 115.
Unobscured Type 2 Active Galactic Nuclei.
48. Papovich, C., Rudnick, G., **Rigby, J. R.**, Willmer, C. N., Egami, E., & Rieke, M. J. 2009, ApJ, 704, 1506.
Paschen α Emission in the Gravitationally Lensed Galaxy SMM J163554.2+661225.
- 47. Rigby, J. R.**, Diamond-Stanic, A. M., & Aniano, G. 2009, ApJ, 700, 1878.
Calibration of the [O IV] 26 μ m Line as a Measure of Intrinsic AGN Luminosity.
46. Finkelstein, S. L., Papovich, C., Rudnick, G., Egami, E., Rieke, M. J., **Rigby, J. R.**, & Willmer, C. N. 2009, ApJ, 700, 376.
Star Formation Across the Face of the Eight O'Clock Arc.
45. Dressler, A., Oemler, A. Jr., Gladders, M., Bai, L., **Rigby, J.**, & Poggianti, B. 2009, ApJL, 699, 130.
Evolution of the Rate and Mode of Star Formation in Galaxies Since z=0.7.
44. Diamond-Stanic, A. M., Rieke, G. H., & **Rigby, J. R.** 2009, ApJ, 698, 623.
Isotropic Luminosity Indicators in an Complete AGN Sample.
43. Freedman, W., **Rigby, J.**, Madore, B., Persson, S., Sturch, L., & Mager, V. 2009, ApJ,

- 695, 996. *The Cepheid Period-Luminosity Relation at Mid-Infrared Wavelengths: IV. Cepheids in IC 1613.*
42. Madore, B., **Rigby, J.**, Freedman, W., Persson, S., Sturch, L., & Mager, V. 2009, ApJ, 693, 936. *The Cepheid Period-Luminosity Relation at Mid-Infrared Wavelengths: III. Cepheids in NGC 6822.*
41. Madore, B., Freedman, W., **Rigby, J.**, Persson, S., Sturch, L., & Mager, V. 2009, ApJ, 695, 988. *The Cepheid Period-Luminosity Relation at Mid-Infrared Wavelengths: II. Second-Epoch LMC Data.*
40. Oemler, A., Dressler, A., Kelson, D., **Rigby, J.**, Poggianti, B., Fritz, J., Morrison, G., & Smail, I. 2009, ApJ, 693, 152
Abell 851 and the Role of Starbursts in Cluster Galaxy Evolution
39. Dressler, A., **Rigby, J.**, Oemler, A., Fritz, J., Poggianti, B., Rieke, G., & Bai, L. 2009, ApJ, 693, 140
Spitzer 24 micron detections of starburst galaxies in Abell 851.
38. Freedman, W., Madore, B., **Rigby, J.**, Persson, S. E., & Sturch, L. 2008, ApJ, 679, 71
The Cepheid Period-Luminosity Relation at Mid-IR Wavelengths: I. First-Epoch LMC Data.
37. Alonso-Herrero, A. et al. (**Rigby 5th author**) 2008, ApJ, 677, 127
The Host Galaxies and Black Holes of Typical $z \sim 0.5\text{--}1.4$ AGN.
- 36. Rigby, J. R.**, Marcillac, D., Egami, E., Rieke, G. H., Richard, J., Kneib, J.-P., et al. 2008, ApJ, 675, 262
Mid-Infrared Spectroscopy of Lensed Galaxies at $1 < z < 3$: The Nature of Sources Near the MIPS Confusion Limit.
35. Donley, J. L., Rieke, G. H., Pérez-González, P. G., **Rigby, J. R.**, & Alonso-Herrero., A. 2007, ApJ, 660, 167
Spitzer Power-law AGN Candidates in the Chandra Deep Field North.
34. L. Cortese et al., 2007, MNRAS, 376, 157
The strong transformation of spiral galaxies infalling into massive clusters at $z \sim 0.2$.
33. Marcillac, D., **Rigby, J. R.**, Rieke, G. H., & Kelly, D. 2007, ApJ 654, 825
Strong dusty bursts of star formation in galaxies falling into cluster RXJ0152.7-1357.
32. Ballantyne, D. R., Shi, Y., Rieke, G. H., Donley, J. L., Papovich, C., & **Rigby, J. R.** 2006, ApJ 653, 1070.
Does the AGN Unified Model Evolve with Redshift? Utilizing the X-ray Background to Predict the Mid-Infrared Emission of AGN.

31. Egami, E., et al., 2006, ApJ, 647, 922
Spitzer Observations of the Brightest Galaxies in X-ray-Luminous Clusters.
- 30. Rigby, J. R.**, Rieke, G. H., Donley, J. L., Alonso-Herrero, A., & Pérez-González, P. G. 2006, ApJ, 645, 115.
What Makes X-ray-Selected Active Galactic Nuclei Appear Optically Dull.
29. Barmby, P. et al., 2006, ApJ, 642, 126
Mid-infrared Properties of X-ray Sources in the Extended Groth Strip.
28. Milutinovic, N., **Rigby, J. R.**, Masiero, J. R., Lynch, R. S., Palma, C., & Charlton, J. C. 2006, ApJ, 641, 190.
The Nature of Weak Mg II Absorbing Structures
27. Alonso-Herrero., A. et al., 2006, ApJ, 640, 167
Infrared Power-law Galaxies in the CDFS: AGN and ULIRGs.
26. Donley, J. L, Rieke, G. H., **Rigby, J. R.**, & Pérez-González, P. G. 2005, ApJ, 634, 169
Unveiling a Population of AGN Not Detected in X-rays.
25. Pérez-González, P. G., et al., 2005, ApJ, 630, 82
Spitzer View on the Evolution of Star-forming Galaxies from $z = 0$ to $z \sim 3$.
24. Shi, Y., Rieke, G. H., Neugebauer, G., Blaylock, M., **Rigby, J.**, Egami, E., Gordon, K. D., & Alonso-Herrero, A. 2005, ApJ, 629, 88
Far-Infrared Observations of Radio Quasars and FR II Radio Galaxies.
- 23. Rigby, J. R.**, Rieke, G. H., Pérez-González, P. G., Donley, J. L., Alonso-Herrero, A., Huang, J.-S., Barmby, P., & Fazio, G. G. 2005, ApJ, 627, 134
Why Optically Faint AGNs Are Optically Faint: The Spitzer Perspective.
22. Bell, E. F. et al., 2005, ApJ, 625, 23
Toward an Understanding of the Rapid Decline of the Cosmic Star Formation Rate.
21. Egami, E. et al. (**Rigby 6th author**) 2005, ApJL, 618L, 5
Spitzer and Hubble Space Telescope Constraints on the Physical Properties of the $z \sim 7$ Galaxy Strongly Lensed by A2218.
20. Le Floc'h, E. et al., 2004, ApJs, 154, 170
Identification of Luminous Infrared Galaxies at $1 < z < 2.5$.
- 19. Rigby, J. R.** et al. 2004, ApJs, 154, 160
24 Micron Properties of X-Ray-selected Active Galactic Nuclei.
18. Alonso-Herrero, A., Pérez-González, P. G., **Rigby, J. R.**, et al. 2004, ApJs, 154, 124
The Nature of Luminous X-Ray Sources with Mid-Infrared Counterparts.

17. Egami, E. et al., 2004, ApJS, 154, 130
Spitzer Observations of the SCUBA/VLA Sources in the Lockman Hole: Star Formation History of Infrared-Luminous Galaxies.
16. Ivison, R. J. et al., 2004, ApJS, 154, 124
Spitzer Observations of MAMBO Galaxies: Weeding Out Active Nuclei in Starbursting Protoellipticals.
15. Serjeant, S. et al., 2004, ApJS, 154, 118
Submillimeter Detections of Spitzer Space Telescope Galaxy Populations.
14. Wilson, G. et al. (**Rigby 6th author**) 2004, ApJS, 154, 107
Extremely Red Objects in the Lockman Hole.
13. Dole, H. et al., 2004, ApJS, 154, 93
Confusion of Extragalactic Sources in the Mid- and Far-Infrared: Spitzer and Beyond.
12. Dole, H. et al., 2004, ApJS, 154, 87
Far-infrared Source Counts at 70 and 160 Microns in Spitzer Deep Surveys.
11. Papovich, C. et al., 2004, ApJS, 154, 70
The 24 Micron Source Counts in Deep Spitzer Space Telescope Surveys.
10. Huang, J.-S. et al., 2004, ApJS, 154, 44
Infrared Array Camera (IRAC) Imaging of the Lockman Hole.
9. **Rigby, J. R.**, & Rieke, G. H. 2004, ApJ, 606, 237
Missing Massive Stars in Starbursts: Stellar Temperature Diagnostics and the IMF.
8. Young, P. A., Knierman, K. A., **Rigby, J. R.**, & Arnett, D. 2003, ApJ, 595, 1114
Stellar Hydrodynamics in Radiative Regions.
7. Charlton, J. C., Ding, J., Zonak, S. G., Churchill, C. W., Bond, N. A., & **Rigby, J. R.** 2003, ApJ, 589, 111
High Resolution STIS/HST and HIRES/Keck Spectra of Three Weak MgII Absorbers toward PG1634+706.
6. Green, E. M. et al., 2003, ApJ, 583L, 31
Discovery of a New Class of Pulsating Stars: Gravity-mode Pulsators among Subdwarf B Stars.
5. **Rigby, J. R.**, Charlton, J. C., & Churchill, C. W. 2002, ApJ, 565, 743
The Population of Weak MgII Absorbers II: The Properties of Single-Cloud Systems.
4. Omar, A., Anantharamaiah, K. R., Rupen, M., & **Rigby, J. R.** 2002, A&A, 381, 29
VLA detection of OH absorption from the elliptical galaxy NGC 1052.

3. Charlton, J. C., Mellon, R. R., **Rigby, J. R.**, & Churchill, C. W. 2000, ApJ, 545, 635
Anticipating High-Resolution STIS Spectra of Four Multiphase MgII Absorbers: A Test of Photoionization Models.
2. Charlton, J. C., Churchill, C. W., & **Rigby, J. R.** 2000, ApJ, 544, 702
QSO Absorption Line Constraints on Intragroup High-Velocity Clouds.
1. Churchill, C. W., **Rigby, J. R.**, Charlton, J. C., & Vogt, S. S. 1999, ApJS, 120, 51
The Population of Weak Mg II Absorbers I.: A Survey of 26 QSO HIRES/Keck Spectra.

NON-REFEREED PUBLICATIONS

The LUVOIR Team 2019, *The LUVOIR Mission Concept Study Final Report*,
<https://arxiv.org/abs/1912.06219>

Rigby, J. R., et al. 2019, *The production and escape of ionizing photons from galaxies over cosmic time*, Astro2020 Science White Paper.

The LUVOIR Team 2018, *The LUVOIR Mission Concept Study Interim Report*,
<https://arxiv.org/abs/1809.09668>

Atherton, T. et al., *LGBT+ Inclusivity in Physics and Astronomy: A Best Practices Guide*.
First edition 2014; Second edition 2019.

Rigby, J. R., Sonneborn, G., Pollizzi, J., Brown, T., & Isaacs, J. 2012, *Science operations with the James Webb Space Telescope*, Proc. SPIE, 8442, 29.

Prieto, J. L., **Rigby, J. R.**, Scowcroft, V., et al. 2010, *Late time Spitzer detection of the 2008 optical transient in NGC 300*, The Astronomer's Telegram #2406

Numerous conference proceedings and posters